Applicants: Abdennour et al.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) An endodontic fiber suitable for the local delivery and sustained release of one or more medicaments incorporated therein to an intracanal treatment site, comprising a rigid copolymer polymer vehicle having incorporated therein one or more medicaments, wherein the fiber has a size and shape suitable for placement in a root canal.
- 2. (Previously Presented) The endodontic fiber of Claim 1, wherein the medicament is selected from the group consisting of antibiotics, anti-inflammatory agents, antimicrobial agents, immune reagents, immunomodulatory agents, and combinations thereof.
- 3. (Previously Presented) The endodontic fiber of Claim 2, wherein the medicament is an antibiotic selected from the group consisting of clindamycin, tetracycline and combinations thereof.
- 4. (Currently Amended) The endodontic fiber of Claim 1, wherein the fiber polymer vehicle is an ethylene vinyl acetate copolymer having a diameter of from about 0.1 mm to about 2.0 mm and the medicament is clindamycin incorporated at a dose of about 2.0 mg to about 5.0 mg per 10mm of fiber.
- 5. (Original) The endodontic fiber of Claim 2, wherein the medicament comprises a combination of an antibiotic and an anti-inflammatory agent.
- 6. (Currently Amended) A modified periodontal fiber suitable for the delivery and sustained release of medicament incorporated therein to an intracanal treatment site, comprising a rigid eopolymer polymer vehicle having incorporated therein one or more medicaments, wherein the eopolymer polymer is treated to decrease its surface tackiness and wherein the fiber has a size and shape suitable for placement in a root canal.
- 7. (Currently Amended) A method for the local delivery and sustained release of a medicament to an intracanal treatment site comprising:

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(a) obtaining an endodontic fiber suitable for intracanal use having one or more medicaments incorporated therein, wherein said endodontic fiber comprises a rigid eopolymer polymer composition;

- (b) positioning the fiber of (a) in the root canal such that the fiber is in direct contact with the treatment site; and
- (c) maintaining the fiber at the treatment site, wherein the medicament is delivered to the treatment site at a controlled rate.
- 8. (Original) The method of Claim 7, wherein the endodontic fiber is a modified periodontal fiber or an intracanal fiber.
- 9. (Currently Amended) A method of treating an endodontic bacterial infection comprising the steps of:
 - obtaining an endodontic fiber suitable for intracanal use having one or more medicaments incorporated therein, wherein said endodontic fiber comprises a rigid eopolymer polymer composition;
 - (b) inserting the fiber of (a) into a root canal such that the fiber is in direct contact with a treatment site in the root canal; and
 - (c) maintaining the fiber at the treatment site, wherein the antibiotic is one or more medicaments are delivered to the treatment site.
- 10. (Original) The method of Claim 9, wherein the endodontic fiber is a modified periodontal fiber or an intracanal fiber.
- 11. (Currently Amended) A method of disinfecting a root canal receiving endodontic treatment comprising:
 - (a) obtaining an endodontic fiber suitable for intracanal use having one or more medicaments incorporated therein, wherein said endodontic fiber comprises a rigid eopolymer polymer composition;
 - (b) inserting the fiber of (a) into a debrided and irrigated root canal such that the fiber is in direct contact with a treatment site in the root canal; and
 - (c) maintaining the fiber at the treatment site, wherein the medicament is administered to the treatment site at a controlled rate.

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- 12. (Original) The method of Claim 11, wherein the endodontic fiber is a modified periodontal fiber or an intracanal fiber.
- 13. (Currently Amended) A method of reducing inflammation in periapical tissue of a tooth undergoing endodontic treatment, comprising:
 - (a) obtaining an endodontic fiber suitable for intracanal use having incorporated therein an anti-inflammatory agent, wherein said endodontic fiber comprises a rigid eopolymer polymer composition;
 - (b) positioning the fiber into a <u>treatment site in a</u> debrided and irrigated root canal such that the fiber is in direct contact with an inflamed tissue in the root canal; and
 - (c) maintaining the endodontic fiber at the treatment site, wherein the antiinflammatory agent is delivered to the site of inflammation.
- 14. (Original) The method of Claim 13, wherein the endodontic fiber is a modified periodontal fiber or an intracanal fiber.
- 15. (Currently Amended) The endodontic fiber of claim 1, wherein said fiber polymer vehicle comprises an ethylene vinyl acetate copolymer comprising less than about 20% vinyl acetate by weight.
- 16. (Previously Presented) The endodontic fiber according to Claim 15, comprising less than about 15% vinyl acetate by weight.
- 17. (Previously Presented) The endodontic fiber according to Claim 15, comprising less than about 10% vinyl acetate by weight.
- 18. (Previously Presented) The endodontic fiber according to Claim 15, comprising about 9.3% vinyl acetate by weight.
- 19. (Previously Presented) The endodontic fiber according to Claim 15, having a diameter of less than about 0.5mm.
- 20. (Previously Presented) The endodontic fiber according to Claim 18, having a diameter of less than about 0.5 mm and one or more medicament incorporated therein.

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21. (Previously Presented) The endodontic fiber of claim 1, wherein said fiber is impregnated with said one or more medicaments.

- 22. (Previously Presented) The modified periodontal fiber of claim 6, wherein said fiber is impregnated with said one or more medicaments.
- 23. (Previously Presented) The method of claim 7, wherein said endodontic fiber is impregnated with said one or more medicaments.
- 24. (Previously Presented) The method of claim 9, wherein said endodontic fiber is impregnated with said one or more medicaments.
- 25. (Previously Presented) The method of claim 11, wherein said endodontic fiber is impregnated with said one or more medicaments.
- 26. (Previously Presented) The method of claim 13, wherein said endodontic fiber is impregnated with said one or more medicaments.
- 27. (Previously Presented) The endodontic fiber of claim 15, wherein said endodontic fiber is impregnated with said one or more medicaments.